

Near Site Sensitivity

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BNL Daya Bay Meeting
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Installation Schedule

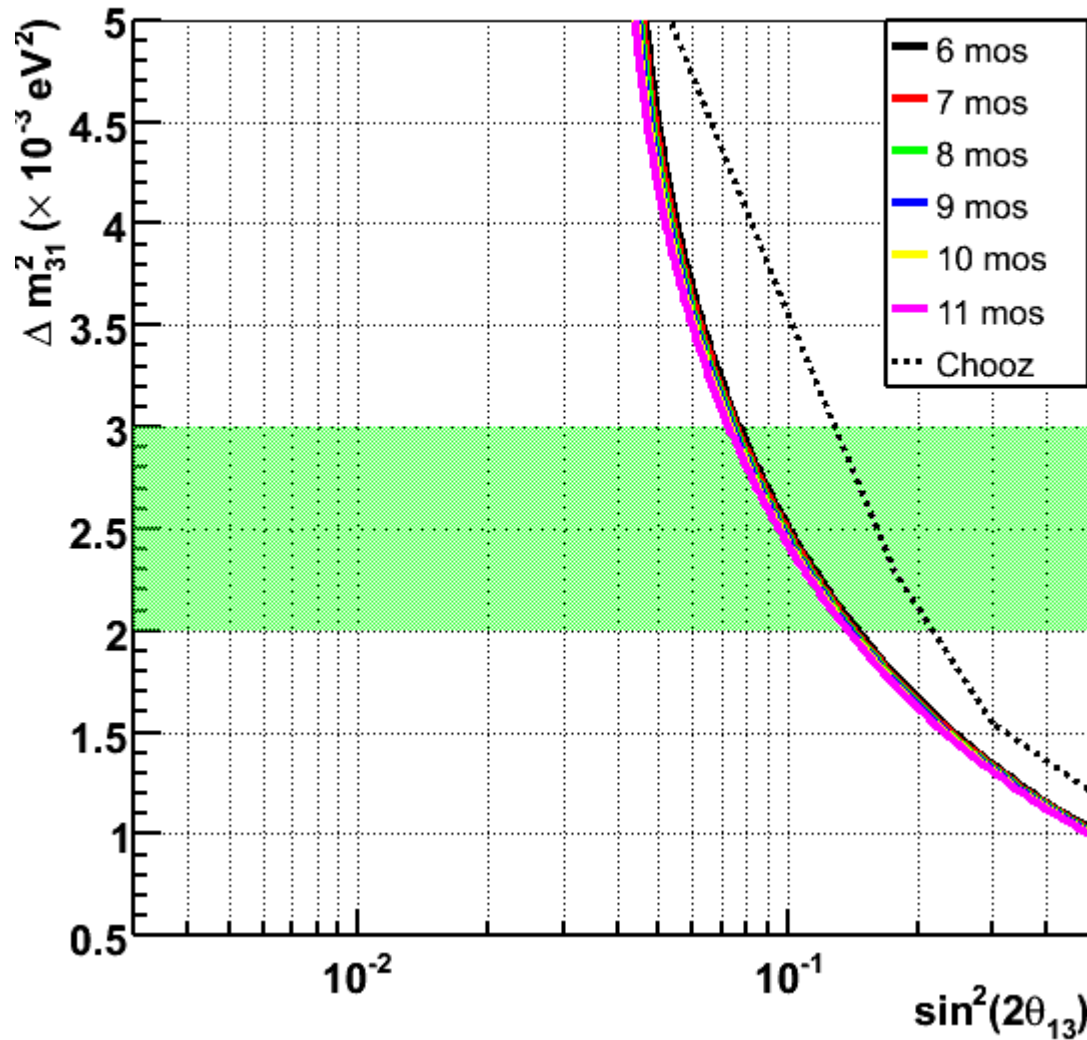
Detectors 1&2 will be installed at Daya Bay near site in 3rd quarter 2009, and will remain there through mid-2010. Can expect ~9 months of data.

Detectors 3&4 are scheduled to be installed at Ling Ao near site in 2nd quarter 2010.

All detectors are scheduled to be deployed in their final configuration in 3rd quarter 2010.

Is there a physics argument for installing 3&4 at Ling Ao earlier than planned?

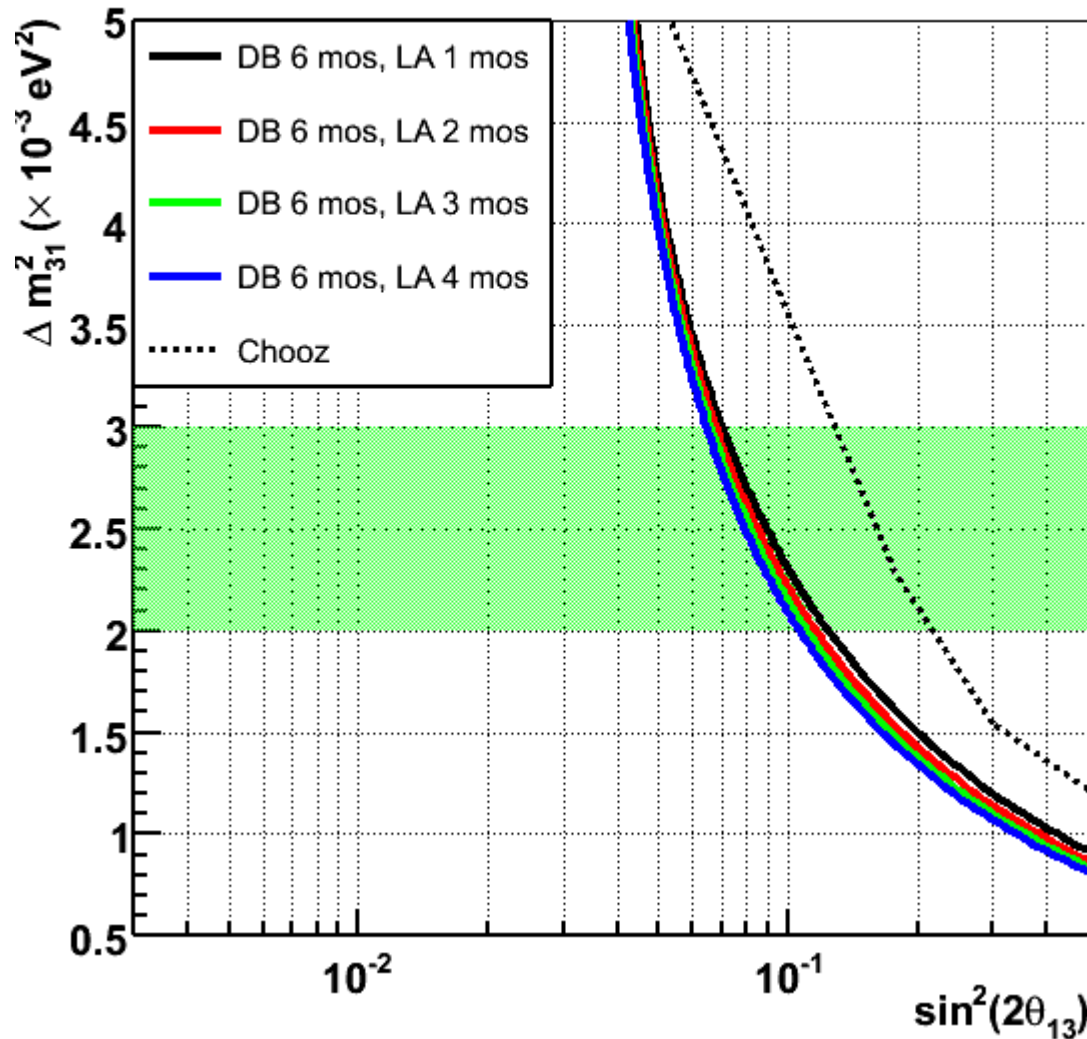
Daya Bay Near Site Sensitivity



at $\Delta m^2 = 2.5 \times 10^{-3} \text{ eV}^2$

0.100 for 6 months,
down to 0.095 for
11 months

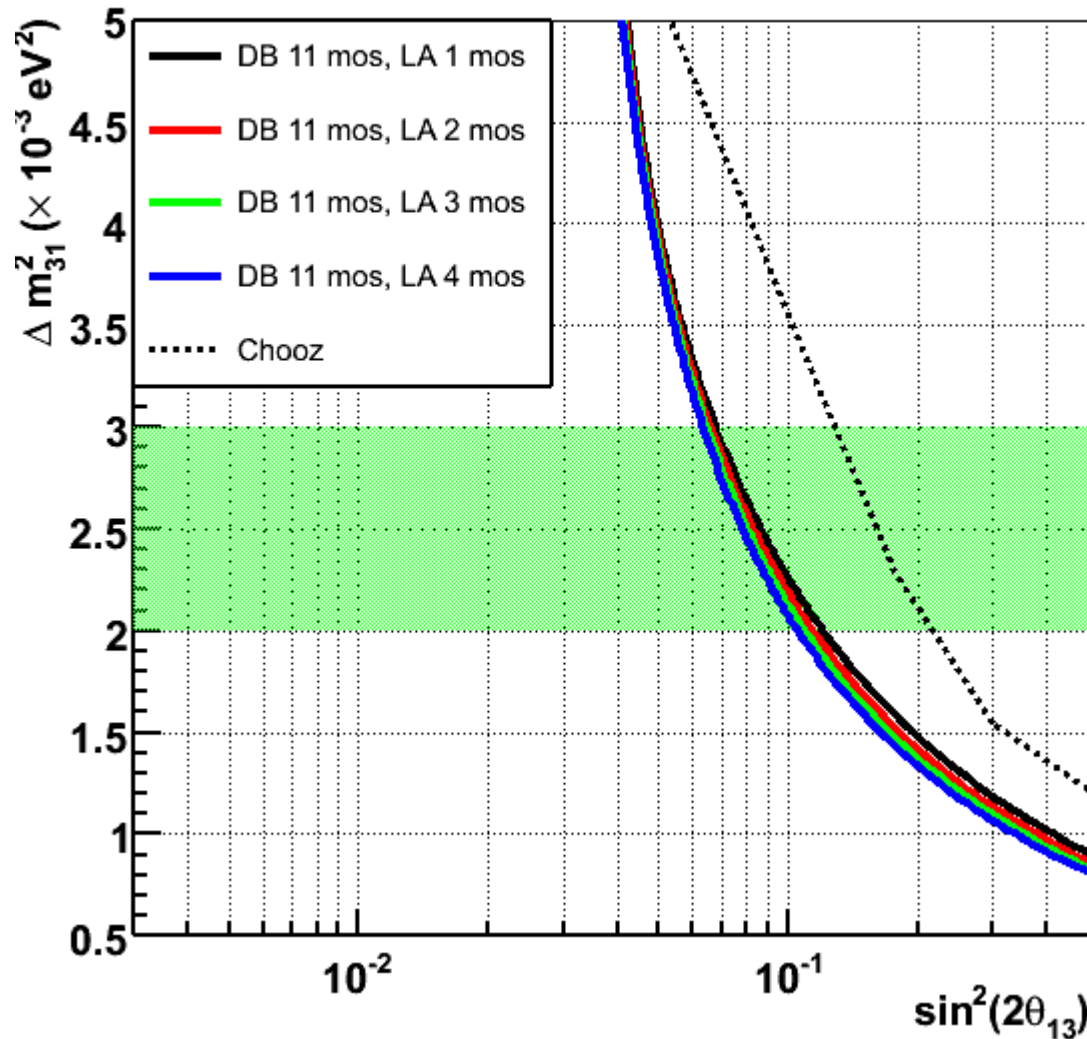
Daya Bay + Ling Ao



at $\Delta m^2 = 2.5 \times 10^{-3} \text{ eV}^2$
for 6 months Daya Bay

0.089 for 1 month Ling
Ao, down to 0.079 for 4
months

Daya Bay + Ling Ao



at $\Delta m^2 = 2.5 \times 10^{-3} \text{ eV}^2$
for 11 months Daya Bay

0.086 for 1 month Ling
Ao, down to 0.078 for 4
months

Summary

- with 6 months data with only Daya Bay near, sensitivity of 0.100
- with 11 months of Daya Bay near plus 4 months of Ling Ao near, sensitivity of 0.078
- how would energy scale uncertainty affect this?